

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matters of)	
)	
Inquiry Concerning the Deployment of)	GN Docket No. 09-47
Advanced Telecommunications Capability to)	
all Americans in a Reasonable and Timely)	
Fashion, and Possible Steps to Accelerate)	
Such Deployment Pursuant to Section 706 of)	GN Docket No. 09-137
the Telecommunications Act of 1996, as)	
amended by the Broadband Data)	
Improvement Act)	
)	
A National Broadband Plan for Our Future)	GN Docket No. 09-51

Comments – NBP Public Notice #19

**COMMENTS BY THE UNIVERSITY OF TEXAS SCHOOL OF LAW ON THE
NOTICE FOR COMMENT RELATING TO UNIVERSAL SERVICE, INTERCARRIER
COMPENSATION AND THE NATIONAL BROADBAND PLAN**

**University of Texas School of Law
with collaborating University of Texas units**

Lowell Feldman, School of Law
Gary Chapman, LBJ School of Public Affairs
Kenneth Flamm, LBJ School of Public Affairs
Sharon Strover, College of Communications
Jeff Andrews, College of Engineering
Ted Rappaport, College of Engineering

December 7, 2009

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION AND EXECUTIVE SUMMARY.....	3
DISCUSSION.....	8
I. Overview.....	8
<i>Low Income</i>	10
Proof of Concept Example.....	11
II. General Recommendations	16
A. <i>Transition Current USF Funding to Broadband and Wireless</i>	16
B. <i>Modify Existing Qualification Processes to Support Community- Based Projects</i>	19
C. <i>Refresh Participation in the Universal Service Fund</i>	23
D. <i>Rural Areas</i>	24
E. <i>Intercarrier Compensation</i>	31
III. Responses to Specific Questions	33
A. <i>Size of the Universal Service Fund</i>	33
B. <i>Contribution Methodology</i>	34
C. <i>Transitioning High-Cost Support to Advanced Broadband Deployment</i>	34
D. <i>Competitive Landscape</i>	37
E. <i>High-Cost Funding Oversight</i>	37
F. <i>Lifeline / Link Up</i>	37
CONCLUSION.....	39

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matters of)	
)	
Inquiry Concerning the Deployment of)	GN Docket No. 09-47
Advanced Telecommunications Capability to)	
all Americans in a Reasonable and Timely)	
Fashion, and Possible Steps to Accelerate)	
Such Deployment Pursuant to Section 706 of)	GN Docket No. 09-137
the Telecommunications Act of 1996, as)	
amended by the Broadband Data)	
Improvement Act)	
)	
A National Broadband Plan for Our Future)	GN Docket No. 09-51

Comments – NBP Public Notice #19

**COMMENTS BY THE UNIVERSITY OF TEXAS SCHOOL OF LAW ON THE
NOTICE FOR COMMENT RELATING TO UNIVERSAL SERVICE, INTERCARRIER
COMPENSATION AND THE NATIONAL BROADBAND PLAN**

INTRODUCTION AND EXECUTIVE SUMMARY

The University of Texas at Austin is a premiere university with a student body in excess of 50,000 and research programs that span multiple disciplines. The University has a strong educational and research background in the area of communications in general and more than 25 years' experience operating an extensive 15 System institution broadband infrastructure in particular. In conjunction with its numerous cosponsors, the University sponsored four¹ BTOP and/or BIP applications, including a proposal to develop a sustainable data and voice low income

¹ Anyone desiring a full copy of each of the University of Texas' applications need only request. Our sincere hope is that our applications can serve as a model for how public subsidies for the information superhighway lead to public superhighways and not overbuilt private toll roads serving private interests. There are over 10 faculty members participating as part of our proposed projects including faculty from engineering, law, communications, and public policy discipline.

service plan for low income communities (the Greenline² application) which focuses on underserved low income areas in Texas, and a proposal to solve a documented middle mile problem in 51 rural Texas locations where currently no federal USF money is available (the Texas Open Pop Project or “TOPP”). As such the research and work by the faculty at the University of Texas is directly relevant to the creation and deployment of a better and more modern Universal Service Plan. The University of Texas School of Law has also previously commented on how the University of Texas’ Broadband Clearinghouse and Best Practices Center (“BPC”) is synergistic with the FCC’s proposed “Clearinghouse.” The School of Law was a prime participant in promoting these applications and will play a significant role in the contemplated programs.

NB Public Notice No. 19 requests comment on various specific issues as to the appropriate scope, goals, and forward looking means for universal service to be considered in light of the public interest goal to expand access and availability of broadband to unserved and underserved areas. The Law School strongly supports the development of goals and implementation strategies to support expansion of broadband to unserved and underserved areas. That support has been demonstrated by previous activities at the Law School and our sister schools at the University of Texas as well as applications for BTOP and BIP funding designed to separately address middle mile challenges, low income end-user access, and structural issues in the communications industry, *i.e.* the Greenline and TOPP applications that create a sustainable non-profit Broadband service for high cost rural Texas areas where even with historical USF

² Greenline contrasts with “Redline,” a common investment and service practice by incumbent providers. For profit providers naturally redline areas because they anticipate the revenue opportunity is insufficient to sustain the business plan and adequately contribute to the profit base. The Greenline application targets “underserved areas.” We measured “underserved” by looking at adoption rates in specific low income areas. The Greenline project focuses on the supply side and lowers on-going cost of service for voice and data to poor areas. Further we propose to directly partner with low income housing providers to streamline the eligibility process and prevent ongoing abuse of the system by many current Eligible Telecommunications Companies, who merely provide a discount to increasingly less valuable and technically obsolete plain old telephone service.

funding and assistance the marketplace has failed.

By far, the most important driver for both universal service and Intercarrier Compensation reform should be a focus on determining where the public interest is best served through continued funding. The current funding regimes are based on opaque and hidden taxation schemes. The resulting expenditure of the billions of dollars annually obtained through these schemes does not directly benefit the public; instead the subsidies merely benefit for profit service providers with no requirement that USF show that the subsidy program actually promotes significant service adoption and provision where there would otherwise be none. There is no effort within the currently-structured USF program to collect useful data or provide any sort of accountability analysis that would allow the government to evaluate whether it is having a significant, effective, or efficient impact on service provision. This has been a recurrent theme in objective outside analyses of the functioning of the USF program by the GAO.³

This is the root problem of the current Intercarrier Compensation and Universal Service regimes. Having money flow to private interests providing a largely unregulated “service” with little accountability, no performance evaluation, and no public oversight is simply bad public policy. The Commission should investigate sustainable alternatives tailored to directly serve public interests. The USF has been co-opted by incumbent rent seekers; this usurpation of the public interest for private gain must stop. The fresh look provided by this proceeding creates a great opportunity for the FCC to craft a better and more precise system that advances the *public’s*

³ See, e.g., GAO (1998), Schools and Libraries Corporation: Actions Needed to Strengthen Program Integrity Operations Before Committing Funds, United States General Accounting Office Testimony GAO/T-RCED-98-243, available at: <http://www.gao.gov/archive/1998/rc98243t.pdf>; GAO (2000), Schools and Libraries Program: Application and Invoice Review Procedures Need Strengthening, United States General Accounting Office Report GAO-01-105, available at: <http://www.gao.gov/new.items/d01105.pdf>; GAO (2005a); Greater Involvement Needed by FCC in the Management and Oversight of the E-Rate Program, United States Government Accountability Office Report GAO-05-151, available at <http://www.gao.gov/new.items/d05151.pdf>; GAO (2005b); Concerns Regarding the Structure and FCC’s Management of the E-Rate Program, United States Government Accountability Office Testimony GAO-05-439T, available at: <http://www.gao.gov/new.items/d05439t.pdf>.

interest.

Indeed, one of the principal objectives of a revamped USF program ought to be to create a base of data and experience that will allow empirically based scientific research to assist government agencies in further improving an efficient and effective public network policy. For example, is one basic premise of the USF that the current subsidy structure significantly lowers prices faced by low income and rural consumers of telecomm and internet services, demonstrably correct? If the subsidies do significantly lower prices to the relevant consumers, is this an effective and efficient means of improving access to the network? Are there other types of measures—for example, educational programs or community access points directly targeting identified clusters of underserved populations—that would be more effective and efficient expenditures of scarce resources in furthering these public connectivity goals? The current USF programs make no attempt to improve public (or for that matter, private) understanding of the answers to these critical questions. But untested assumptions and empirically unverified assertions about the answers to these same questions underlie the very structure of the current USF programs.

By contrast, the University of Texas' faculty and students have proposed that a small portion of the national stimulus investment in the BTOP and BIP programs be invested in experimental programs (our “Greenline” and “TOPP” projects) to service specific underserved communities, and in the process create a public research base which will ultimately provide some preliminary answers to the big and broad public policy questions at the heart of the many billions of dollars of national investments in USF. We are hopeful that some of insight gained by the University of Texas faculty and students as they have studied the USF and Inter-carrier Compensation systems can aid in the creation of a better forward looking system and a much

clearer modern definition of the “Public Interest” as it relates to the universal need for people to be connected to other people. The School of Law and its academic partners at the University of Texas stands ready to assist the FCC in the creation of the Broadband Plan and, hopefully, through our participation in the AARA process we can implement examples of how public monies can be used to fund public broadband infrastructure in lieu of being directed toward the traditional focus on very narrow private benefit with no requirement to demonstrate effective performance in furthering the broad public service goals that ultimately are the rationale for USF. A well functioning regulatory body should focus on “finding Right vs. Wrong, not deciding Right vs. Left.” In this vein the University of Texas School of Law, along with faculty members from multiple other University of Texas Colleges, file these comments.

DISCUSSION

I. Overview

These comments are structured in four parts:

- Low income, drawing on our experience related to the Greenline project;
- Rural “High-Cost,” which draws on our experience from the TOPP project;
- Intercarrier reform, which considers the current Intercarrier Compensation regime from a neutral academic and technical perspective; and
- Answers to specific questions posed in the FCC Request for Comment.

The current mechanism for allocating and distributing Universal Service Fund (“USF”) resources must be modernized. The *status quo* does not reflect the reality of communications in the United States now or what it is likely to be in the near future. The current framework Service was created in the wake of the Telecommunications Act of 1996 (“FTA96”), at a time when public access to the Internet was primarily over dial-up lines, and the total size of the Internet was limited to just 15 million hosts. Since then, broadband and the World Wide Web have revolutionized almost every facet of personal and commercial communications. Dial-up lines, which just thirteen years ago served as the primary conduit for both voice and data traffic, have begun to disappear, and are being replaced by more flexible wireline and wireless broadband connections to the internet. Voice communications are becoming less of a “service” and more like an “application,” riding alongside data and video traffic.

While the current USF has continued for thirteen (13) years without substantive change, this pales in comparison to the Intercarrier Compensation scheme. The United States’ Interconnection/Intercarrier compensation policies still resemble the system that AT&T and Theodore Vail envisioned one hundred years ago. Vail’s vision may have been forward looking policy in its time, but if he tried to do the same thing today it would likely fail nearly every

current anti-trust and technical validity test. The regime artificially ties all communications to and requires support of ancient, legacy, outdated and inefficient networks, services and business models and incumbent providers in ways that are plainly anti-competitive. The Inter-carrier Compensation regime is an opaque and hidden subsidy/taxation scheme that is wrongly believed to implement vague and poorly defined “public interest” policies. These subsidies were the centerpiece of “rate design” practices by multiple regulatory bodies during the era of traditional regulation of “natural monopolies,” yet they persist today, even when there is supposed to be competition and multiple networks and providers. This byzantine Inter-carrier Compensation regime still imposes these hidden subsidies notwithstanding the clear command in §§ 252(d)(2) and 254(b)(5) and (k) that they promptly be eliminated. Dozens, if not hundreds, of regulatory rulings and competition for political influence at both the state and federal level have led to continued incontrovertible tying to support technology and business practices that are now clearly obsolete and would be unsustainable without the support.

Thirteen years ago FTA 96 expressly required that all hidden subsidies were to transition to overt subsidies, and subsidies could be used only for “noncompetitive” services. These requirements are breached every day the current system operates. Reform must occur now, and it is highly appropriate that it occur in coordination with development of the national broadband plan.

The solution to the current Inter-carrier Compensation morass must include a systemic focus that takes a fresh look at the public interest in light of new technology and public needs, such as the expansion of broadband, and support of inter-modal, intra-modal and “inter-model” competition.⁴ Proper policy would enunciate forward looking rights and obligations related to

⁴ The most recent Statistics of Common Carriers indicate that incumbent LECs bill for 577,264,000,000 Inter-carrier Access Minutes per year. The Regional Bell Operating Companies alone netted nearly \$10,000,000,000

the mutual exchange of traffic and eliminate all technical “standards” that are now obsolete and result in charges that benefit legacy incumbent networks through hidden taxation of new entrants and networks.

If the FCC determines that the public interest is best served by continuing to tie “subsidies” from Intercarrier compensation to support areas where markets fail in providing adequate service at a reasonable price, this determination must be explicit and overt, and not hidden in a maze of accounting rules. While these comments reflect some of our current faculty’s perspective, a declaration of resolve, creation of clear, specific rules of the road, and enunciation of the guiding policy principles the FCC will use to reach its immediate conclusions is more important than adopting or rejecting specific University of Texas School of Law proposals. There is no doubt that any immediate decision will strip or deny a private interest to which some provider likely believes it is entitled. Without clear policy precepts, any implementation of policy will continue to suffer from countless arguments over what an individual carrier deems to be “fair.”

Low Income

Despite the fact that landline voice service to homes and business is in rapid decline across America, the allocation and qualification mechanisms put in place thirteen years ago continue to reflect technologies and business models of the pre-Internet era. As a result, billions of dollars are inefficiently spent each year supporting telecommunications strategies and technologies that may no longer be preferable or cost effective solutions for reaching out to the poor and incorporating them into the national net. Americans all lose when the targeted funds

from Intercarrier switched access and similar compensation. Meanwhile, AT&T and Verizon enjoy operating free cash flow profit of \$80,000,000,000 per year, which comes largely from new technology entrants. Does the FCC really think that this hidden “competition tax” – that directly benefits AT&T and Verizon and funds closed, unregulated networks or goes directly to shareowners’ pockets – is the result of good public policy?

fail to be effectively utilized because they are based on outmoded business practices or may be put to better use and can be better invested to bridge the digital divide.

The solution to this problem is that USF reform should follow the path of directly supporting broadband connectivity and infrastructure which can then be used to support voice applications. Narrow support of any defined “voice service” should end. This can be achieved by transitioning from narrowly focusing on previous generations of obsolete circuit switched technology to IP-based and open broadband and wireless solutions. The USF should reconsider its one-size-fits-all mentality that primarily supports incumbents and basic “voice” service, and should instead embrace more flexible, creative solutions that promise to realize the dream of universal *access* to communications.⁵ We must evolve to new solutions that meet the needs of the public that is served by these programs, rather than supporting the carriers that provide “services.” This necessarily means that what is supported will be different because the focus is consumer need, not silo provider “services.” The supported needs may often be less costly to provide than ordinary “local phone service.” Total expenditures could well be lower and provide greater value in the long run if specific needs and capabilities rather than specific providers were targeted.

Proof of Concept Example

Although it is just one of many possible approaches, the University of Texas has participated in several proof-of-concept projects to test alternative technical and business models for providing voice and broadband service to low-income Americans. As a result of our studies, we have completed the build-out of some of these services to various facilities managed directly

⁵ “Voice” is merely an application in the IP world. And, more importantly, it is only one of many ways people can communicate. Why should we support “voice” but not email or texting, when it is usually far more efficient to communicate through non “voice” mechanisms? The point is we need to support *connectivity* and *access* not legacy voice service.

by 501(c)(3) non-profits such as the Housing Authority of the City of Austin (HACA) and USFon. One such project is the Lakeside Apartments, which serves 164 elderly and disabled residents in a twelve-story tower located on Lady Bird Lake in downtown Austin. The Lakeside project employs a variant VoIP technology in a managed environment. This project dramatically lowers the cost of delivery, but it still meets the technical criteria required to obtain current voice-based USF subsidies. The result is standard analog telephone service to each room, along with high-speed broadband access to each room. Using new technology will enable the project to provide both broadband and voice services at a recurring cost that approaches the current subsidy *discount* per residence for voice service alone,⁶ thus making the project sustainable in the long run while providing universal service for a community that previously had no broadband service and just a handful of voice lines in place.

In contrast, traditional subsidized Lifeline service offered by local ILECs provides only voice service, and the subsidy amounts to only a small discount off a much larger monthly bill. Before our project, under the old system, approximately 20 out of the 164 rooms had voice services, and five had Broadband.

The Lakeside project, however, will provide much more than just basic service. The service provider, USFon (a 501(c)(3) not-for-profit CLEC founded by students from the University of Texas School of Law), is working in partnership with both HACA and Austin Free-Net to provide on-going education and support, including computer training. Long-term, the project hopes to be able to provide low-cost computers to the residents, pre-loaded with low-cost open-source software and links to key websites. Using email services in addition to voice

⁶ The target operating cost for both broadband and voice is \$10 per month per user. One way our cost is reduced is by eliminating the overhead associated with direct end user relationships, and instead partnering directly with the Housing Project. The result is a service that is bundled with the rent. Our understanding of HUD practices shows that bundling utility services with the rent is permissible, and we believe this practice should be favored.

mail to the rooms, the management of Lakeside and various care providers will finally be able to communicate directly with each of its residents, a vast improvement over its 40-year practice of taping messages to the residents' doors.

If we receive funding via the Greenline BTOP application, we can expand on this concept. The success of Lakeside and similar projects in the future depends greatly on the ability to access USF subsidies to cover ongoing service costs. In theory, since every resident of these facilities by definition meets the income criteria established for Lifeline subsidies, this should not be a problem. Unfortunately, the business model that has been developed to qualify households for subsidies reflects an outmoded, for-profit notion of a one-to-one relationship between a service provider and its customers, and is inappropriate and unwieldy for non-profit-driven community-based projects like Lakeside.

In order to qualify for Lifeline subsidies in Texas, an individual must presently traverse an expensive and risky gauntlet, filling out confusing paperwork, providing documentation that oftentimes does not exist, and applying to a hidden bureaucratic that has little accountability to the individuals it serves. This model reflects the reality of how circuit switched service is delivered by for-profit incumbent telecommunications companies in America but it does not allow for the efficiencies and community service orientation that are the goal of charitable organizations like USFon, working in concert with public agencies and other charitable organizations.

Furthermore, the current USF model is limited to subsidizing voice connections as a standalone service and does not reflect the current reality that voice can be merely one of many applications riding on a more-powerful and better broadband connection. USF today is a one-size-fits-all approach that is inappropriate for 21st Century America. In terms of overall cost

efficiencies, it is not clear why the USF should continue to subsidize a voice line and then consider whether to fund a broadband line as well. If the broadband connection is subsidized first, then the voice is cheap or even free.

The current one-size-fits-all approach also fails in another way – it is service-oriented, rather than solution-oriented. Providing broadband access to a family that cannot afford a computer is like providing free access to a tollway to a family that does not own a car. It is imperative that funding mechanisms in the future support investments in low-cost computers for the poor and similar enabling technologies, perhaps as an extension of the Link Up program (which currently is a reimbursement for the one-time cost of delivering voice service). If America can deliver One Laptop Per Child to the poor children of underdeveloped nations, it should be able to do the same for its own children, who find themselves locked out of an education system that is increasingly abandoning expensive books and other written materials for Internet-based solutions.⁷

One key issue underlying the conceptual foundation of the USF program that is addressed by UT's "Greenline" demonstration project proposal, is determining to what extent broadband and communication service use in underserved areas really is hindered by price and cost, rather than other social, experiential, and educational obstacles. Surveys by the Pew Internet and American Life Project have repeatedly shown that cost is not necessarily the primary obstacle to broadband adoption among non-adopting households.⁸ We envision experimenting with offering different types and amounts of subsidies to broadband costs, to randomly selected households in

⁷ Shirley Jenkins, *Hardback textbooks near final chapter as learning goes online*, Austin American-Statesman, Nov. 24, 2009, at B1.

⁸ For example, in its most recent study of broadband adoption, the Pew survey shows that only 10% of Internet non-users cite "too expensive" as the reason. The top three reasons cited by non-users were "not interested in getting online" (22%), "can't get access where they live" (16%), "some other reason" (13%). See John Horrigan, *Home Broadband Adoption 2009*, © 2009 Pew Internet & American Life Project, pp. 7-8, available at <http://www.pewinternet.org/Reports/2009/10-Home-Broadband-Adoption-2009.aspx>.

the project area, in order to understand and estimate the actual price elasticity of broadband demand in targeted underserved groups. This is one of those fundamental questions underlying the conceptual assumptions of the USF program on which existing public research provides only the most tentative and inconclusive of guidance. The UT Greenline project would create empirical, publicly available data which could be used to answer this question and better inform public policy. In addition, the Greenline project would be also experimenting with supporting different sorts of educational and community training programs, and public access programs, in order to better understand the extent to which these efforts can cost effectively stimulate Internet use, and public service delivery, in underserved population segments.

The current USF subsidy strategy is also domicile-centric, ignoring the fact that many of the Americans who need a communications safety net the most are often homeless or highly transitory. Programs that address the special needs of this population (through, for example, provision of permanent phone numbers, voice mail, and public phone banks at homeless centers) can have a tremendous impact on their quality of life (and on the ability of family members, care givers and public agencies to maintain contact with the transitory and homeless poor) at a fraction of the cost using existing subsidies. The current system narrowly subsidizes only a voice-based business model and it obstructs entry by innovators (profit and non-profit) with better solutions to consumer needs (including broadband) that might be less costly. Laudable projects should not be kept on the sidelines in favor of products and services that favor the old way of doing business.

Homeless people, for example, simply cannot qualify for any communications support under the existing scheme because they have no address. While we do not advocate giving homeless people free “ordinary” phone service, we do advocate establishing a coordinated IP

phone bank system into homeless shelters and allocating a working phone number/e-mail/voicemail account to each homeless person. We estimate that such a program can be created for a few thousand dollars per month and have the capacity to provide some form of service to tens of thousands of homeless people. Such community-based communications services simply do not compute in today's USF world and are 100% ineligible for any type of subsidy. Good ideas that reduce costs and increase adoption to the targeted beneficiaries would no longer be excluded in a forward looking USF model.

II. General Recommendations

A. Transition Current USF Funding to Broadband and Wireless

Currently, Lifeline USF funding is targeted at insuring universal access to circuit switched voice lines. However, since the advent of FTA96, broadband has become a dominant and revolutionary force in communications across the planet, and wireless technology has evolved from “car phones” and “bricks” to highly mobile devices that serve as fully-functional miniaturized computers. To continue to subsidize investment in providing traditional voice lines whose use is rapidly declining in the marketplace is akin to subsidizing investment in telegraph and teletype, and amounts to an unconscionable waste of billions of dollars in public funds (via the USF “tax”). Instead of subsidizing a technical solution that the free market is increasingly leaving behind, subsidies should instead be directed to projects that address the real communications challenge of our generation – closing the widening digital divide that threatens to permanently exclude the poorest members of our society from jobs, education, healthcare and other fundamental human needs. To begin implementation of new USF related to low income, the FCC could immediately announce a sunset schedule for all current low income support and high cost support, and begin a meaningful transition period.

But, as we transition subsidies away from traditional voice lines, we cannot fall into the trap of focusing once more on one-size-fits-all strategies targeted toward a new medium. Instead, the nation needs to specify the real problems we are trying to solve, and make sure our subsidies are in fact aimed at solving those problems, and in the most cost-effective manner. Competition among alternative technological solutions, and solution providers, should be encouraged in all instances. In addition, we need to be mindful of the historical reality that these subsidies have historically been tilted toward wealthy rural residents and the richest of the poor, leaving the neediest members of our society on the other side of an ever-widening digital divide.

Thus a recertification of ETC status should have as a requirement a sustainability statement on not only what groups it attempts to impact, but also how a sustainable service will be offered. Further, solutions should encourage direct partnership with low income housing providers who invest in building sustainable and lower cost infrastructure if they are supported from the targeted community in need. Adoption metrics should be required to assure that subsidies are being utilized efficiently. And to the degree possible, entry by not-for profits should be encouraged when for-profit solution providers can not show adoption of its solutions.⁹

While many communities and groups in America may have similar needs and would therefore be responsive to similar programs, the diversity of communities and groups requires parallel diversity, flexibility and creativity in the technical and business models deployed to meet their needs. Even the physical layout of a given community can dictate unique solutions. For example, while we are running voice and broadband service to each room at Lakeside using Cat3 and Cat5 wiring, that solution is impractical at several other HACA facilities we will be serving,

⁹ Remember that we have already acknowledged market failure to the underserved areas. Thus an insistence that the “market” should solve the problem is really only serving a special interest. Where markets fail, the government should encourage a solution that is cost effective. Similar to low income housing, not for profits are encouraged to play, and this should be the case for underserved areas.

where mesh networks can more cost-effectively deliver service to a widely distributed campus of duplexes and four-plexes. Similarly, Wi-Fi based phones and other hybrid broadband/wireless technologies can simplify delivery of service in poor neighborhoods, eschewing the need to access existing last-mile access to homes (and eliminating the need to lease those assets at a substantial cost).

If we are to serve the most disadvantaged members of our society, it is critical that we divorce ourselves of the notion that “service” is only delivered to “households.” To the extent that Lifeline subsidies are truly intended to serve as a lifeline to all Americans as the conduit that will keep them connected to our society and our social infrastructure, some of this money should be allocated to projects serving the homeless and near-homeless communities in innovative ways. As an example, at Father Joe’s Villages in San Diego (which provides housing, food and life services for former residents of San Diego’s streets), phone banks are available for outbound calls, but no provision exists for inbound calls from potential employers, public agencies, care givers, or concerned family members.

Similarly, providers of free legal and medical care in Texas consistently lose contact with their clients, whose “Cricket” phones are turned off at the end of the month for lack of payment and whose phone numbers are then automatically released back to Cricket’s reusable pool. One solution for these individuals would be to secure “permanent” phone numbers with “permanent” voice mail, accessible from free phone banks or from any Internet connection at homeless shelters and similar public facilities. Given the low cost per terabyte of modern data storage, and the advent of open source software, this service could be provisioned at a very low cost, either by charitable organizations such as USFon or by civic-minded for-profit companies – whether incumbents or competitive carriers – supported by a tiny fraction of subsidies currently sent to

for-profit carriers. Again, the question is “how is the public interest best served?” Continuing a poorly functioning policy driven by inertia and incumbent special interest is plainly not the right answer to that question.

B. Modify Existing Qualification Processes to Support Community-Based Projects

One of the key factors that drove three law students from the University of Texas to found USFon was their discovery that, currently, only 15% of Texas residents who are eligible for Lifeline actually receive subsidies, and that those subsidies still only account for a third or less of their total telephone bill. At the same time, recent studies, including one sponsored by the FCC itself, have shown that America trails other developed nations in access to high-speed broadband service. Indeed service is almost nonexistent in many neighborhoods in America that sit just blocks away from neighborhoods with the highest penetration rates. The problem is not technical but is instead economic and administrative. Simply put, for-profit companies and their trade associations rarely have as a primary motivation helping the poor navigate the complicated process of qualifying for Lifeline and Link Up subsidies, and lack motivation to wire out neighborhoods who cannot afford the high cost of their residential broadband service. Conversely, private service providers understandably have their greatest economic interest in investing resources in neighborhoods which can afford a high cost residential broadband service.

To understand this problem, it is helpful to follow the steps an individual must take to apply for the subsidy.¹⁰ The first step is to establish voice service with a company in the community that supports Lifeline subsidies. “Establishing service” means that an individual must sign up for telephone service and pay the initial hookup cost, plus up to several months of service fees. In addition, if the individual has poor credit (which is almost universally true of the

¹⁰ Solix web site (<http://www.solixinc.com/internet/source/aboutsolix.aspx?id=188>).

poor), they must pay substantial deposits to the phone company in advance. Assuming the consumer has the resources available to clear this hurdle, the next step is to apply for the subsidy. In Texas, a database of eligible individuals is managed by SOLIX, which is a wholly-owned subsidiary of USAC – the FCC-approved administrator of the Universal Service Fund. Thirteen (13) years ago when the FCC approved USAC as the administrator through a no-bid process, many of the FCC Commissioners had great trepidations. USAC was a special-purpose entity created by NECA, which is – at least in part – an advocacy organization.¹¹

A completed application form (which, according to SOLIX, must be wholly filled out by the individual receiving the benefits), must be mailed to SOLIX, which then tests the information against their database. It is important to emphasize here that no assistance can be provided by social workers or care givers to residents filling out these forms, even when the resident is physically or mentally handicapped or of diminished physical or mental capacity (such as is often the case with the elderly). If the individual is qualifying on the basis of low or no income, she must include proof of low income, presumably in the form of a W-2, tax statement, two recent pay stubs, a letter from an employer verifying poverty, documents of Social Security or Unemployment Insurance, and/or copies of recent bank statements showing direct deposit of any income. Unfortunately, in the case of those who have no income, it is almost impossible to document that fact, and even documenting low income is often not practical. This is the classic legal conundrum of proving a negative, creating serious documentary problems for all those except the working poor who approach the magic poverty line. It is the USF equivalent of Catch-22: you need a telephone to get a job, but you cannot get a telephone because you have no job.

¹¹ NECA's influence in advocating policies that influence the administration of universal service policies to favor those carriers that receive most of the USF funding and a continuation of the hidden tax that benefits NECA members places USAC in, at best, an awkward situation.

For those able to get past this step,¹² SOLIX examines the application and determines whether or not to approve it. The only notice that the application has been accepted is a line item on a subsequent telephone bill noting the discount. If the application is rejected for some reason, no notice or explanation is provided. An unsuccessful applicant does have some right to appeal, but the legal nature of such disputes raises the real question of the economics of mounting such an appeal given that the discount totals only ten dollars a month.

After all of this, even if the applicant is successful, he or she is still obligated to pay for the several months of service before the application was successfully processed, and, typically, winds up with a ten dollar discount on a thirty dollar or more telephone bill. If unsuccessful, the applicant can continue the undiscounted service, or cancel and face any associated discontinuation fees. At any rate, in the end, the Lifeline program provides a very small monthly benefit to recipients in exchange for navigating a complex and highly uncertain application process, a process that charitable organizations such as USFon are largely unable to mitigate.

Applying this process to a large scale project like Lakeside raises even more issues. The technology investment USFon is making at Lakeside demands high participation rates in order to be economic. Wiring every room for service at once dramatically lowers the cost of build-out over having to run individual lines on demand. Similarly, high participation rates translate into a low per-user cost of routing equipment and middle mile backhaul. High participation also delivers a significant benefit to facilities management, who can use the telephones and broadband service to communicate directly with residents, rather than have to physically walk to each room and tape messages on the resident's doors.

¹² We strongly recommend streamlining subsidy eligibility for low income to focus on including broadband and voice applications into existing low income housing projects as a more efficient and better way to invest in sustainable infrastructure and service.

Since every resident of Lakeside is prequalified for low income (it is a requirement to be a resident of the facility in the first place), a charitable organization such as USFon should be able to automatically qualify each room for subsidy. At the very least, USFon should be able to provide a spreadsheet list of residents and room numbers for inclusion into the SOLIX database. However, SOLIX's requirement that each application be individually completed by qualifying residents, and that telephone service be established and paid for in advance of submitting an application, translates into a difficult and unreasonable burden for the charitable service provider, with no discernable benefit to the public. This is the nut of the problem – subsidizing based on a “service” rather than a “solutions” model. (In fact, in a previous project involving housing for the homeless, USFon was only successful in qualifying 19 out of 55 customers in the facility, despite the fact that none of the facility's residents had received any substantial income in years. At Lakeside, we did better, and only 31 requesters have been “rejected.”)

In short, the current qualification and subsidy model reflects the institutionalization of a business model that is greatly outdated and unresponsive to the real communications needs of today's poor population. It places all of the risk on failure to qualify on the applicant and makes the application process complex and unapproachable. It even denies an applicant any assistance by case workers and charitable organizations in filling out the forms (in contrast to the IRS, which welcomes such assistance in completing tax forms). Despite the directive by Congress to insure that all Americans have access to basic communications services, the existing application process ensures that only the most dogged will qualify, and that those who arguably are the most fragile and needy of public assistance will fail.

As the USF transitions into a new era, the process of qualifying projects and individuals for subsidies must be reformed. The alternative is to continue to squander the billions of dollars

in USF taxes collected each year while the poorest members of our society are increasingly relegated to the fringes of our society and our economy. The experiences recounted here are also reflected in other aggregate data studies that illustrate the inefficiencies of the current Linkup and Lifeline programs (e.g., Garbacz and Thompson, 2003; Akerberg et al., 2008). Akerberg et al. (2008) in particular note that Lifeline programs would be improved if states simply signed up eligible households directly.¹³

C. Refresh Participation in the Universal Service Fund

As the Universal Service Fund is transitioned to accommodate broadband and other technologies (including, optimally, changes that encourage competition among innovative service offerings and improvements in the subsidy qualification process), existing subsidized services should be sunset in their entirety to allow for improved economics and efficiencies, freeing up more USF resources for projects that better reflect the realities of modern communications. Just as the Universal Service Fund generally requires recipients of Lifeline subsidies to re-qualify every year to receive public support, communications providers who are the ultimate recipients of USF subsidies should be required to demonstrate during the transition period that they have adopted the most cost-effective technologies for delivering broadband and voice services to their subsidized customers – including a mandated approach to wholesale such services through better infrastructure to low income properties where residents are granted automatic qualification status.¹⁴

¹³ Akerberg, D., Michale Riordan, Gregory Rosston, Bradley Winner (2008), Low-income demand for local telephone service: Effects of Lifeline and Linkup, Stanford Institute for Economic Policy Research, SIEPR Discussion Paper No. 07-32, available at <http://www.siepr.stanford.edu/papers/pdf/07-32.pdf>; Garbacz, Christopher and Herbert Thompson (2003), Estimating telephone demand with state decennial data from 1970-1990: Update with 2000 data, *Journal of Regulatory Economics*, 24:3, 373-378.

¹⁴ The same simple reform can be applied to Intercarrier Compensation. An LEC that is profitable should simply be required to change a zero intercarrier rate, or at most nothing more than the § 252(d)(2) “additional cost” price for termination. This would eliminate the incumbents’ current hegemony, and that is sorely needed.

Any communications company that receives subsidies should be required to demonstrate compliance with other overarching public goals, like sustainability and non-discrimination. Additional criteria to consider include maintenance of network neutrality, offering on a common carrier basis low cost middle mile solutions that untie end user service from monopoly-like transport needs for a community and abandons anti-consumer and anti-competitive practices through participation in open industry forums such as the Broadband Clearinghouse and Best Practices Center (“BPC”).

D. Rural Areas

We find that rural regions are at severe disadvantages when it comes to speedier broadband connections. Even if broadband exists, it is being delivered at sub-standard speeds and at prices that are not justified. Our recent experience in preparing an alternative middle mile solution for nearby rural communities offers a case in point.

The University of Texas, via its TOPP project, collaborated with dozens of communities and other non-profit utilities to target the delivery of middle mile solutions and corresponding infrastructure to 51 communities where today absolutely no federal USF money is available. Correspondence with and written letters from County Judges, City Managers, Community Centers and medical providers and surveys have consistently suggested that the middle mile problem is a critical barrier to ending the digital divide for rural areas. Importantly, the University of Texas secured in kind participation in excess of our grant request. Also importantly, the University of Texas attempted to avoid areas which are “served.” In this context, we view the term “served” as providing a meaningful broadband option to consumers at a price similar to urban areas and at a sustainable speed as defined by BTOP and BIP.

Nonetheless, several incumbent ILEC providers and/or their unregulated affiliates are claiming some of these areas are somehow served.¹⁵ It is our understanding that AT&T submitted a filing – which has not been made available to us – that intends to impact 36 markets which we believe are unserved and have no broadband middle-mile solution. Of those 36 rural markets, AT&T is the ILEC in 19 of these markets but is not the ILEC in 17 of these markets. In the 17 non-ILEC markets, AT&T does provide some wireless CMRS services, but according to the current resident population there is NO broadband. We have hundreds of questionnaires from citizens and direct confirmation of lack of service by elected officials, including dozens of letters stating no broadband is available from the ILEC or anyone else. In fact, when some of the communities learned of AT&T's claims – Gonzalez & Columbus, Texas (AT&T ILEC areas) and Weimar (a wireless CMRS area covered by AT&T) - these communities sent us updated letters of support saying still they cannot get service from AT&T or any other provider. Last month, UT sponsored a town hall meeting at the Dale Community Center (again an area AT&T says is covered by CMRS) and not only did 100 people complain of no broadband, but many also claimed there is no cell service. This is an excellent example of the disconnect between a service provider-centric approach to awarding subsidies¹⁶ with no accountability or program evaluation, based on an internal business plan that may or may not be implemented on a timely basis, versus a consumer solution-based approach that responds to specific areas where markets are failing.

To its credit, the NTIA recommended that applicants work with community groups and talk to the consumers that would be serviced. The University of Texas took the NTIA's viewpoint to heart. Our applications were not existing projects looking for funding. Instead, we

¹⁵ We are unable to see the incumbents' entire submission, only a public "summary."

¹⁶ The University of Texas faculty would very much like to study the internal AT&T propagation maps and plans to serve these areas and hereby requests the FCC to require all such submissions be made public so it will be possible to discern where the disconnect is between the providers of service and their customers.

focused on the areas of need and the consumers. Our approach was to locate where the current process has left gaps and to seek funding to solve those problems. As nonprofits, we would have no desire to provide broadband services just to compete with an existing provider. Indeed our application request ONLY solves the middle mile and will leave it to others to provide a retail service. Instead, the facts demonstrate that the areas in question are all unserved or underserved with a true middle mile broadband solution.

This does not mean that there are not existing efforts by some providers to provide service to some of these 51 communities. After we reviewed the responses of those who filed responses claiming an area was “served,” the University noticed that two responders were actually targets of our proposed “Middle Mile” solution. We sent them each a copy of our full application including the attachments which detail our specific efforts (a full application is not available on-line via the Broadband USA website, only executive summaries). Below is one e-mailed response:

Lowell and Courtney,

I have reviewed your application and now fully understand the intentions behind it. I would like to write a second response in support of your application and link the application that Reveille intends to file in the second round to your current application. I am excited about the potential of your proposed network!

I need to know where to go online to file a second response. Please send to me a link to the web page.

I would also like to work with you to establish a POP in Lexington, Somerville and rural Smithville. Reveille also has a system in rural Brenham that is still in place, although it was deactivated last year due to economic reasons. With your network supplying bandwidth it could feasibly be turned back on. We can also supply locations and personnel for the POPs.

Sincerely,
Jeff Sullivan, President
Reveille Broadband

Mr. Sullivan simply did not understand that the TOPP proposed network would solve the current middle mile problem for his company to allow him to provide true broadband service to

Lexington, Somerville, Smithville and Brenham (AT&T claims the last three have coverage – but Mr. Sullivan also confirmed this is incorrect). Mr. Sullivan also indicated that only expensive T-1s are currently available for middle mile in these areas and although his fiber based cable system can deliver service locally at high speeds, effective bandwidth to end users is squeezed below the thresholds set by NTIA and RUS.

The other service provider responder which was designed to be a target customer of the TOPP middle mile project was Internet America. Internet America is a publicly traded company that focuses on serving its customers through wireless technology. It filed a response to Brenham, Weimar, Schulenburg, Hempstead, and Flatonia Texas¹⁷ clearly believing that somehow the University of Texas TOPP project was to compete against their efforts to solve Broadband to these markets rather than assist them. Once the full application was reviewed, Internet America completely reversed itself and now wholly supports the project:

¹⁷ Again, AT&T claims that each of these areas is served somehow by AT&T, again an assertion that is not true according to Internet America.



December 6, 2009

Ms. Courtney Swaney & Mr. Lowell Feldman
The University of Texas at Austin
P. O. Box 7726
Austin, Texas 78712

Re: University of Texas TOPS application

Dear Ms. Swaney & Mr. Feldman;

Internet America filed a response to the University of Texas at Austin application for BIP and BTOP funding in October, 2009.

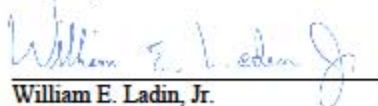
At the time the company reviewed the application it assumed that UT intended to compete with other last mile providers. The information on the Broadband USA web site was not clear as to the intention of the University, therefore, this conclusion.

Recently after discussing the Internet America response with Mr. Feldman, and the subsequent review of the UT application, Internet America is glad to participate and support the UT application for Broadband Grant Funding of its middle-mile infrastructure costs.

UT has identified a fact that is a significant hindrance to deployment of broadband services and that is the high cost of that bandwidth from the current middle mile providers.

Therefore, Internet America is coming out in support of the University of Texas at Austin application for BIP and BTOP grant funding for it's middle mile application.

Sincerely



William E. Ladin, Jr.
Chairman & CEO

10930 WEST SAM HOUSTON PARKWAY, N. • SUITE 200 • HOUSTON, TEXAS • 77064

Why is this TOPP application, and the various questions as to what is and is not currently serviced, relevant to high cost USF policy? The University of Texas application in question focuses solely on a middle mile solution with a firm embrace as a “Common Carrier.” We believe that our experience shows that the badly needed support highlighted by the University of Texas middle mile solution is directly related to the incumbent’s inability or refusal to provide adequate and cost effective middle mile solutions.¹⁸

Each of the areas subject to our middle-mile proposals are rural, and reflect a subset of approximately 500 rural high cost communities in Texas that do not qualify for any federal USF high cost assistance but still lack a willing and cost-effective middle-mile provider. The University and its partners have no interest in spending money where not necessary. The problem is that the incumbents oppose applications, such as those of the University even though they will not provide similar services at reasonable prices and under similar conditions. These communities do not have access to middle mile broadband.

How can we solve this issue in the context of reforming USF? The answer rests in traditional regulation. Common carrier obligations to provide fiber-based broadband at pre-set rates and under pro-peering terms could be required of all recipients who wish to continue to receive rural support of any sort. TOPPs has committed to meet this standard as part of the University of Texas BTOP/BIP applications. Why should incumbents who **are** common carriers be in opposition? The TOPP network is available to all, and on a non-profit basis.

Private companies like the unregulated affiliated members of the Texas LoneStar network (who filed responses for five of the communities covered by the University of Texas application including Columbus, Schulenburg and Weimar), have a pecuniary interest in preventing

¹⁸ Reveille Broadband, for example, now understands it could replace the six T-1s it currently shares among its estimated 1,200 users with a Gig-E FOR LESS than it currently pays the ILECs for the T-1s.

solutions. They are willing to keep communities captive while not meeting the communities' broadband needs because their sister incumbent affiliates receive millions of dollars from the federal and state USFs in neighboring territories.¹⁹ USF Rural investment and the right to charge Inter-carrier compensation should be conditioned on the creation of a "common carrier" middle mile solution by the recipient. It appears that several such providers, including AT&T and Time Warner (who filed a response covering five of the communities), are not willing to make the same commitment as TOPP; rather, they want to stop TOPP, which already has voluntarily embraced common carriage.

If any of these companies are truly willing to provide such a solution on the same terms for the same price without any additional subsidy, they could do so already. It is clear from our investigations and discussions with these communities that none of these companies are offering a middle mile solution or anything even remotely close today.

This said, if the commitment was made and the network exists today that they will provide middle-mile services at the same price and on the same conditions – including a voluntary common carrier accessibility and open peering rights – then the University of Texas would remove any such community from its application pool (this could be done during the due diligence phase). Again, as nonprofits, our only goal is to correct where the market has failed these communities (and to provide jobs consistent with the stimulus plan). We are happy to arrange for AT&T or LoneStar to meet with the City Manager of Weimar or Columbus or Mr. Sullivan. If any current provider will provide a fiber based Gig-E connection back to the University of Texas for \$1,000 per month, we would also consider the specific area served.

¹⁹ USAC or the Inspector General should investigate the lawfulness of 38 Rural ILECs' actions to write off millions of dollars of public subsidy investment from a regulated rate base and turn it over to private hands for the provision of non-regulated high bandwidth services to areas outside of their service territory.

No facilities-based providers have stepped up to the plate. Their private interest dictates that they block others that will. They oppose our application, but they also do not want to provide a comparable service. If they step up, we will step out.

Rural High Cost Reform is simple. First, only broadband should be subsidized. Second, subsidized networks should have mandatory common carrier obligations to make their network capabilities available on an open access basis on prices that are at or reasonably near cost. Where markets fail, public moneys should be used for public benefit, not private benefit.

Finally, although not specifically on point, the FCC should promote all efficient use of existing infrastructure by making clear that all utilities and specifically electric utilities with existing transmission and distribution networks are not only required under the current pole attachment laws and rules to allow for pole attachments by providers, but are also specifically encouraged and allowed to participate in joint planning and co-use of existing and new broadband networks. Many not-for-profit electric utilities are confused. They have been threatened by incumbent LECs who assert that the use of their existing distribution networks for public purposes and at reasonable prices is somehow unlawful. The University Of Texas School Of Law cannot find legal support for these claims. This matter needs to be clarified and resolved.

E. Intercarrier Compensation

Intercarrier Compensation reform should realize that traffic exchange and the associated compensation is related to interconnection between and among networks and a duty imposed by §§ 201, 251(a) and 251(b)(5) and 252(d)(2) that is not excused by § 251(f). Proper policy would focus on three goals:

- 1) Efficient interconnection between and among networks with minimum transaction costs
- 2) Non-discrimination, particularly when it comes to new technology and innovation
- 3) Continued competitive entry, clear and operational standards as well as vigorous operational oversight of bottlenecking functions should be implemented.

Today, thirteen years after the Act, there has been little or no focus on alternative signaling and clearinghouse functions (be it SS-7, SIP, 911 or other mechanisms). The ILECs (AT&T and Verizon in particular) completely dominate this area. Many of the basic signaling functions are monopoly controlled through a tariff system that both denies equal peering rights and dramatically increases the cost of interconnection among peer networks. The existing tandem switching monopoly enjoyed by the ILECs is then used to dominate and establish self serving policies for Inter-carrier billing, largely using ancient concepts tied to telephone number representation. These practices are a very effective barrier to efficient technology adoption and they impose needless increases on costs to the industry, but there is little or no regulatory oversight. Indeed, the University of Texas School of Law is not aware of a single competitive agreement that guarantees the basic right of signaling between networks on a peering/equal basis. If the chosen policy is to use a numbers based signaling architecture that is then used to create an inter-carrier subsidy, these “peering centers” must be divested from the Incumbents and operated by a neutral third party which does no more than operate the “tandem.” Billing and collection should also be divested and handled through a neutral clearinghouse.²⁰ We would prefer that the third party be a non-profit, but at the very least it must not have any ties to the incumbent monopolies.

²⁰ The clearinghouse could also do initial dispute resolution over billing, which would probably clear – or at least mitigate – the wholly congested state and federal dockets.

Unless the technical elements of signaling and data retention are explicitly removed from the command and control structure of the incumbent monopolies, it will be impossible to make the current hidden taxation overt and explicit. All of this can be independent of any particular rate or charge. Structural change to the system is a prerequisite to real reform, and it must go beyond charges and include interconnection, how traffic is exchanged and signaling.

Once the right to dictate “interconnecting technology” is wrestled away from the ILECs, we can eliminate location and distance based payment schemes. Forward looking policy must acknowledge that location is no longer relevant and distance has no impact on cost.

Finally, with the technical and payment schemes made explicit and transparent, the FCC can determine on a more specific basis, and we hope on a need basis, which companies deserve to be subsidized in order to sustain service provision in high cost areas.

III. Responses to Specific Questions

A. Size of the Universal Service Fund

The overall annual size of the Universal Service Fund should be maintained at current levels during the transition to a new, open framework that incorporates broadband, wireless and other emerging technologies. It is premature to estimate changes in the size of the fund prior to identifying alternatives in how those funds can be used to better expand access to telecommunication services among the unserved and the underserved. However, as we embark upon these changes, it is critical to remain flexible in the actual allocation of available funds among the various projects, rather than rigidly adhere to outdated, historical allocation models. In the long term, we believe the size of the USF should be adjusted gradually over time to reflect the real cost of bridging the gap between the “haves” and the “have nots” in our society (the so-

called “digital divide”), and to encourage competition and efficiencies in applying these public resources to solve pressing public problems in communications.

B. Contribution Methodology

Given a short-term moratorium in changes to the overall size of the USF, the contribution methodology should be changed only inasmuch as it is necessary to maintain annual revenues. Long-term, however, changes to the contribution methodology will be inevitable, reflecting the transition from traditional telecommunications services (*e.g.*, “voice”) to more modern technologies (*e.g.*, connectivity and access). The bald truth is that current USF funding mechanisms are largely invisible to the consumers and businesses that actually pay the fees. Absent some consumer backlash over the fees, the only compelling reason to modify the existing contribution formula is to balance some notion of “fairness” among the various service providers and users, which is a problem completely divorced from the bigger issues of sizing and allocating the collected funds.

One area, however, is of specific concern, given our recent experience in implementing USF-based services to underserved communities. In Texas, there is considerable confusion over whether the State can or should tax USF revenues received from the federal government (and, specifically, entities can lawfully be required to include USF receipts in their state USF assessment base). This kind of diminution of federal USF support is, in the end, extremely counter-productive and circular, and should be stopped.

C. Transitioning High-Cost Support to Advanced Broadband Deployment

As noted in the general comments above, we support the rapid transition of Universal Service from a focus on voice service alone to a more modern focus on provision of broadband service (whether wired or wireless) that provides a conduit for a wide variety of applications

(including voice, data, and video). While it would be ideal to be able to crystal-ball the future of broadband, recent history has repeatedly demonstrated that the future is in fact unpredictable. As a result, any fixed formula that purports to allocate USF resources to specific technologies is almost certainly doomed to failure.

In particular, while it was appropriate to limit support to voice service when the USF was first created (since that was, effectively, the only practical communications technology at the time), the focus today should be on providing high-speed conduits that provide *connectivity* and *access* to all potential applications, including “voice,” *as an application*. Furthermore, it is equally critical that the particular physical transport layer selected for a given project be the technology that is demonstrated to be the most cost-efficient solution for that project. In our experience delivering voice and broadband service to high-density urban environments, there is no single transport medium that is appropriate for all situations. In some installations, a fully wireless strategy is most cost-efficient (such as urban neighborhoods, where a single wireless point of presence can reach dozens of homes). In others, particularly urban towers like the Lakeside Apartments, where construction methods and materials act to block wireless signals, a fully wired solution is required. Even the type of wiring used may vary from project to project – in projects involving retrofitting established housing, the most cost-effective solution may involve the creative use of whatever wiring currently exists in the facility.

With that in mind, we believe that the transition from traditional voice-only networks to high-speed broadband should be accomplished as quickly as possible, with continuing support for voice-grade services limited to the absolute minimum needed to prevent loss of basic service to individual subscribers. New and even continued funding should focus on emerging technologies that offer new capabilities, features and functions, along with dramatic increases in

efficiencies and economics of deployment. New approaches that address niche needs of various unserved and underserved groups (such as permanent voicemail and public phone banks) should be favored.

In transitioning out of a voice-based regime, the USF should also embrace a more flexible definition of service quality, rather than the one-size-fits-all philosophy that currently prevails. Traditionally, USF support has mandated provision of high-quality, high-reliability voice services, which translate into severe limitations on the kinds of technologies available to provide those services. In contrast, emerging consumer technologies often offer a lower-quality, lower-reliability voice connection (for example) as a trade-off for severe reductions in cost of service. As an example, Skype offers free long-distance voice calls to other Skype customers, and very low cost service to non-Skype customers; the trade-off is an increased level of complexity in setting up, managing and using the service. Similarly, the prevailing consumer model for broadband suggests a great variation in actual consumer demand and price sensitivity for broadband throughput. USFon's experience is that many customers would prefer free voice and broadband service with rare but occasional service outages to paying a premium for "gold-plated" connections. From a public policy perspective, we believe it is more important to provide a silver-plated service to all of the underserved and/or rural citizens of this country than to insist on a gold-plated standard that leaves large segments of our society bereft of basic and advanced telecommunications services. This principle also applies to support for certain subsets of features and applications (such as permanent voicemail, permanent phone numbers and public phone banks) that are more appropriate for segments of our society that are homeless or highly transitory.

D. Competitive Landscape

Common Carrier obligations related to middle mile broadband services should be an obligation to all networks which receive public assistance. This will allow for innovation and competition to thrive in the last mile connection market and application market.

E. High-Cost Funding Oversight

NECA and USAC should be eliminated and replaced with entities that are run by representatives of consumers, business customers and non-profit groups in underserved areas. We must end the current situation where the system is run by and fundamentally administered by representatives of the very entities that ultimately receive the subsidies. All current funding should be sunset, and new ETC status must be obtained. Central to the right to be an ETC in the future should be an open embrace of Common Carrier broadband obligations.

F. Lifeline / Link Up

The existing funding and qualification mechanisms for Lifeline and Link Up may be adequate to meet the needs of the for-profit communications companies who essentially devised them, but as an instrument of public policy they are grossly inadequate to meet the needs of the populations they were created to serve. Lifeline support for the underserved and unserved represents but a fraction of their overall cost for voice services, and none of their cost for broadband or mobile services. It is available only for individuals with a permanent or semi-permanent residence, and only for those who can somehow fully document their lack of adequate income (and thereby excluding the most needy segments of society, the jobless and those with no income whatsoever). The qualification process demands that applications be evaluated on a one-by-one basis, heedless of any prior determination by other state or federal agencies that the residents of certain facilities meet the same requirements. The application process itself is

complex and consumer-unfriendly and denies applicants even the assistance of social workers and charitable organizations like USFon in filling out the paperwork. Finally, the qualification process itself exists in the shadows, with no transparency to the process, no explanation for why particular applications were denied, and no apparent accountability to anyone.

This is not a condemnation of the process in concept alone, but is rather a commentary of the process in fact. Over the past year, lawyers and law students from the University of Texas School of Law have attempted to navigate the Lifeline bureaucracy and application process as part of pilot projects initiated by USFon. Our experience in all of this has been, to be frank, frightening. In one key project, involving a facility providing housing for formerly homeless individuals, appropriate paperwork was collected and forwarded to Solix for inclusion in Texas' Low Income Discount Administrator (LIDA) database. Of the 54 names submitted (all with zero or negligible income), only 19 names were approved for subsidies. No explanation whatsoever was provided for the 35 applications that were rejected.

USFon has found that the system is also fundamentally inflexible. As a result, 85% of the population eligible for Lifeline support is effectively excluded, the remaining 15% receive support amounting to but a fraction of their monthly bills for voice service alone, as the public continues to shoulder the burden of billions of dollars a year in support inefficiently spent on sub-optimal solutions. Moreover, this does not address the far greater social cost of excluding those 85% from the benefits of even voice communications.

The University of Texas therefore strongly recommends that the funding process be expanded to reflect multiple business models and implementation strategies. In particular, Lifeline support should prioritize support for projects sponsored by non-profit charitable organizations like USFon, which was originally created to serve as a working model for how to

best meet the needs of America's underserved and unserved communities. The "right" result embraces innovative technical and business solutions, and partners with other charitable organizations and public agencies to coordinate implementation of an overarching communications solution that meets all of the communications needs of its target communities. While we anticipate that there will still be a limited need for traditional Lifeline support, we believe, based upon our actual experience and that of project partners such as the City of Houston and the City of Austin, that the greatest efficiencies and the greatest social benefits will come from non-traditional approaches targeted at the neediest communities, incorporating input from the full spectrum of social workers, healthcare professionals, educators, legal aid, public housing, and other groups and individuals committed to serving those communities. A simple phone line at a 30% monthly discount – if you can run the gauntlet – is no longer the answer.

CONCLUSION

The University of Texas at Austin School of Law strongly supports the development of broadband and has demonstrated that commitment by devoting its resources to related research in the past and committing further resources to develop a number of community-supported applications to both directly expand broadband access and more broadly support the development and understanding of broadband best practices to assure that a national deployment strategy maximizes its potential for the benefit of consumers. We support an evidence-based approach to policy that continually evaluates and assesses the impacts of ongoing programs, that collects the data needed by researchers and analysts involved in this effort, and that provides to government policymakers scientifically validated research that ultimately will assist in the design of improved programs and policies.

More specifically, we believe that the billions of dollars pouring into the Universal Service Fund each year should be transitioned into support for expansion of broadband and related services to communities that have historically been “red-lined” by broadband build-out projects, and users who are too poor to afford the monthly cost of broadband service. Access to the Internet is no longer a luxury in America; it is a necessity for daily survival, and therefore should be regarded as a fundamental right. Today, states like Texas are planning to eliminate traditional textbooks in favor of online resources, possibly as early as the next school year, apparently oblivious to the fact that a high percentage of school children are simply too poor to afford access to those resources. In addition, access to other critical social services is also transitioning to an online-only status, leaving Americans with no ready access to the Internet isolated from the very people and services they depend upon for daily survival. If the Universal Service Fund is not changed to better target the needs of this critical and fragile segment of our society, the loss to our society will not just be the billions of dollars currently wasted each year by the inefficient allocation of this fund, but the lives and futures of millions of our fellow Americans.

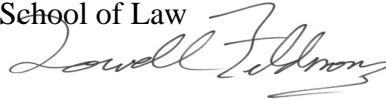
The University of Texas at Austin School of Law appreciates the opportunity to discuss these central and vital issues with the Commission.

Respectfully Submitted,

**UNIVERSITY OF TEXAS SCHOOL OF LAW
AND FACULTY, WITH COLLABORATING
UNIVERSITY OF TEXAS UNITS**

By:

Lowell Feldman
School of Law



Lowell Feldman, School of Law
Gary Chapman LBJ School of Public Affairs
Kenneth Flamm LBJ School of Public Affairs
Sharon Stover College of Communications
Jeff Andrews College of Engineering
Ted Rappaport College of Engineering

December 7, 2009